

**AMENDMENTS TO THE CLAIMS**

1. (Currently Amended) A heat exchanger comprising:  
a fin set ~~(59)~~ including a plurality of fins ~~(57)~~ arranged parallel to each other with an interval therebetween;  
a metallic framework ~~(61)~~ arranged to surround end faces of the fin set ~~(59)~~ in the arrangement direction of the fins and end faces of the fin set ~~(59)~~ in the lengthwise direction of the fins; and  
a serpentine heat transfer tube ~~(63)~~ having straight parts ~~(63a)~~ penetrating the fin set ~~(59)~~ in the arrangement direction of the fins and U-shaped parts ~~(63b)~~ protruding out of the framework ~~(61)~~, wherein  
adsorbents capable of adsorbing moisture from the air and desorbing the moisture into the air is supported on the surfaces of the fin set ~~(59)~~, the framework ~~(61)~~ and the heat transfer tube ~~(63)~~, respectively.
2. (Currently Amended) The heat exchanger of Claim 1 further comprising  
a connector tube ~~(65)~~ for connecting the heat transfer tube ~~(63)~~ with a refrigerant pipe, wherein  
an adsorbent capable of adsorbing moisture from the air and desorbing the moisture into the air is supported on the surface of the connector tube ~~(65)~~.
3. (Original) The heat exchanger of Claim 1, wherein  
the adsorbents are of the same kind.
4. (Currently Amended) The heat exchanger of Claim 1, wherein  
the thickness of the adsorbent layer supported on the surfaces of the fins ~~(57)~~ is not less than 50  $\mu\text{m}$  and not more than 500  $\mu\text{m}$ .
5. (Original) The heat exchanger of any one of Claims 1 to 4, wherein  
a fin pitch is not less than 1.2 mm and not more than 3.5 mm.

6. (Original) The heat exchanger of any one of Claims 1 to 4, wherein  
air velocity is not less than 0.5 m/s and not more than 1.5 m/s.

7. (New) The heat exchanger of claim 3, wherein  
adsorbent is applied to the heat exchanger by immersing a heat exchanger assembly  
comprising said fin set, said framework, and said serpentine heat transfer tube in a slurry mixed  
with the adsorbent.

8. (New) The heat exchanger of claim 1, wherein said adsorbents comprise at least one of  
zeolite, silica gel, activated carbon, organic polymeric material having a hydrophilic or water  
adsorptive functional group, ion exchange resin material having a carboxyl or sulfonic acid  
group, functional polymer material, sepiolite, imogolite, allophane, kaolinite.

9. (New) The heat exchanger of claim 1, wherein  
a thickness of said adsorbents is determined by a relationship between the number of  
fans, fan efficiency, and fan volume.